

Thomas Public Works Authority
122 W Broadway
PO Box 250
Thomas, OK 73669

Grant Application for:

Funding Opportunity Announcement No. BOR-DO-18-F009

Offered through:

Department of the Interior, Bureau of Reclamation

Matthew Reichert
PO Box 25007
Denver, CO 80225
mreichert@usbr.gov
303-445-3865

Contents

	Page
Executive Summary	1
Background Data.....	1
City of Thomas Map	2
Project Description.....	3
Evaluation Criteria	3
Environmental and cultural resources compliance	4
Required permits or approvals	4
Official resolution	5
Project Budget	6

Executive summary

Date: July 10, 2018

Applicant Name: Thomas Public Works Authority

City: Thomas

County: Custer

State: Oklahoma

It is proposed that new electronic smart meters be installed at the following locations operated by the Thomas Public Works Authority (TPWA): all city parks, the city pool, the rodeo grounds, a main meter coming from the water wells, each of the five water wells, the water tower, and the TPWA shop. A total of 3 six inch meters, 2 two inch meters, 1 one inch meter, 4 three inch meters, 1 four inch meter, and 1 eight inch meter will be required with a grand total of 12 meters needed for the project. Additionally it is proposed that a Supervisory Control and Data Acquisition (SCADA) system be installed to provide remote monitoring of all of the TPWA water and sewer system.

The new meters will allow the TPWA to effectively monitor water loss and identify areas of concern with this precious resource. The SCADA System will provide the ability to remotely monitor all aspects of our water and sewer system eliminating the need for hands on monitoring. This will allow for more efficient use of public works employees' time and save the TPWA the current cost of overtime being paid on weekends to make routine well checks etc.

The proposed project of installing new electronic smart meters and a SCADA System will result in accurate water loss readings and more efficient use of public works employees time.

In discussions with smart meter installers it is projected it will take a maximum of two months to complete the project with an estimated completion date of February 2019.

The proposed project is **not** located on a Federal facility

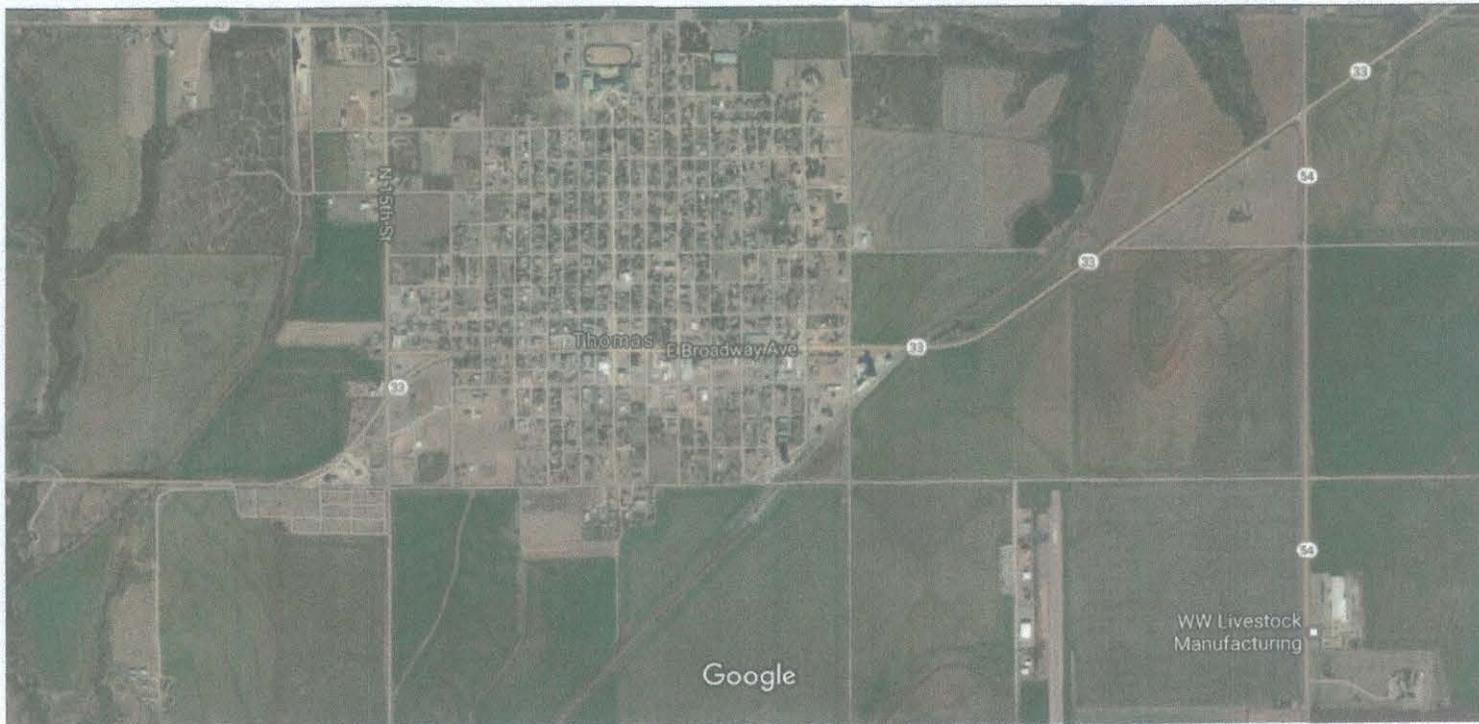
Background data

Map of Proposed Project (City of Thomas – See Attached from link

<https://www.google.com/maps/place/Thomas,+OK+73669/@35.7469526,-98.7606084,2514m/data=!3m1!1e3!4m5!3m4!1s0x87ae998b119f7703:0x958fa40c08717e1!8m2!3d35.7442157!4d-98.747584>)

The source of the water supply for the TPWA comes from five water wells located approximately one mile from town in a water well field. There are currently 618 residential and 7 commercial customers. The water is primarily used for households and businesses. The water consistently tests to be good quality drinking water.

Google Maps



Imagery ©2017 Google, Map data ©2017 Google 1000 ft

1

Project Description

The project goal will be to install new electronic smart meters at locations owned and operated by the TPWA and City of Thomas. This will involve installation of approximately 12 meters as detailed: Ball park (6"meter), Rodeo Grounds (1"), TPWA Shop (6"), Pool (2"), Main from wells (6"), Fire Station (2"), Well #1 (3"), Well #3 (4"), Well #5 (3"), Well #6 (3"), Well #7 (3"), Water Tower (8").

- The problem is that there is currently no way to monitor water loss for the TPWA or electronically monitor how the water and sewer system is functioning at any given time.
- The project will address the problem by installing new electronic smart meters at all City of Thomas locations and a SCADA system. This will allow for accurate assessments of water loss and identification of areas of concern. The SCADA system will improve efficiency of personnel time and provide for savings in overtime currently being spent for weekend monitoring of the water system.
- The expected outcome savings to the city by ultimately reducing areas of water loss and more efficient use of staff time through the ability to remotely monitor the water and sewer systems.

Evaluation criteria

Planning Efforts Supporting the Project:

The proposed project is supported by the Capital Improvement Plan (CIP) initiated by and on record with the Southwest Oklahoma Development Authority (SWODA) which lists installation of new electronic meters and a SCADA system at all city owned locations as number one on our annual plan. This project would help us follow the plan, improve our water systems efficiency and effectively monitor our systems water loss.

Project Benefits:

The benefits that are expected to result from implementation of the proposed project are the ability to effectively monitor water loss and more the efficient use of TPWA workers' time resulting in less overtime.

The expected ability to monitor water loss and increase in available man hours will allow the TPWA to more effectively manage existing resources replacing outdated equipment and water lines to the benefit of the residents of Thomas. This is anticipated to result in an overall improvement in the reliability of the TPWA water supply.

Project Implementation:

The estimated schedule for the project will be to begin installing meters 2-1-2019 beginning at the water wells and working towards the town from there. This method will be followed one location at a time until all areas managed by the TPWA are installed. It is anticipated based on discussion with meter contractors that the project will be completed no later than 4-1-2019.

No permits will be required for implementation or completion of this project.

No engineering or design work will be required in support of this project.

Nexus to Reclamation:

There is no known Nexus to Reclamation project

3

Environmental and cultural resources compliance

The proposed project **does not** include any ground disturbing activities and will therefore not require any environmental compliance funds.

No species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat is known to be in the project area.

There are **no** wetlands or other surface waters inside the project boundaries that potentially fall under Clean Water Act (CWA) jurisdiction as “Waters of the United States.

The water delivery system was originally constructed in approximately 1934.

The proposed project **will not** result in any modification of or effects to, individual features of an irrigation system.

No buildings, structures, or features in the irrigation district are listed or eligible for listing on the National Register of Historic Places.

There are **no** archeological sites in the proposed project area.

The proposed project **will have no** disproportionately high and adverse effect on low income or minority populations?

The proposed project **will not** limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands.

The proposed project does not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.

Required permits or approvals

No permits or approvals will be required for this project.

Official resolution

RESOLUTION No 18-19-01

AUTHORIZING APPLICATION FOR A WaterSMART Grant: Small-Scale Water Efficiency Projects for Fiscal Year 2018 from the U.S. Department of Interior Bureau of Reclamation

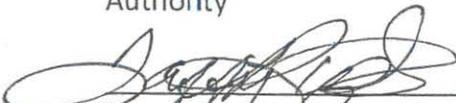
WHEREAS, there is currently no way to monitor water loss for the City of Thomas and installation of electronic meters and a Supervisory Control and Data Acquisition (SCADA) system at all City of Thomas owned and Thomas Public Works Authority locations would assist in providing the ability to do so.

WHEREAS, it is in the best interest of the residents of the City of Thomas and the Thomas Public Works Authority to expedite the preparation and submission of an application for financial assistance from the U.S. Department of Interior Bureau of Reclamation, in the form of a WaterSMART Grant: Small-Scale Water Efficiency Projects for Fiscal Year 2018 and the execution of documents and contracts if the assistance is awarded; and

NOW, THEREFORE, BE IT RESOLVED by the Board of Trustees of the City of Thomas Public Works Authority that the Chairman is hereby authorized and directed to sign an application and related documents necessary to file and process an application with the U.S. Department of Interior Bureau of Reclamation on behalf of the Thomas Public Works Authority

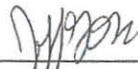
PASSED, APPROVED AND ADOPTED by the Board of Trustees of the City of Thomas Public Works authority this 10th day of July, 2018.

ATTEST:
Authority



Taffy Rigsby, City Clerk

Thomas Public Works



Jeff Gose, Mayor

5 Project budget

Funding Plan and Letters of Commitment:

The non-federal share of the project cost will be obtained through the Capital Outlay fund from the TPWA. More than \$100,000 will be available from this fund on July 1, 2018. No funding from outside sources will be required. A check will be written from this fund to cover the cost-sharing requirement for this project.

Budget proposal

BUDGET ITEM DESCRIPTION	COMPUTATION	\$/Unit	Quantity	TOTAL COST
Salaries and Wages				
Employee 1		\$ N/A		
Employee 2		\$		
Employee 3		\$		
Fringe Benefits				
Full-Time Employees		\$ N/A		
Part-Time Employees		\$		
Equipment				
Item	Smart Meters City Property	\$3,417.44	11	\$37,591.82
Item	SCADA System	\$57,000.00	1	\$57,000.00
Supplies and Materials				
Item A		\$ N/A		
Item B				
Contractual/Construction				
Contractor	Meter Install	\$1,363.64	11	\$15,000.00
Contractor	SCADA equipment install	\$33,400.00	1	\$33,400.00
Other	Engineering	\$17,938.93		\$17,938.93
Other	Project Inspection	\$ 6,904.81		\$ 6,904.81
Other	Contingency (5%)	\$7,149.59		\$ 7,149.59
Indirect Costs				
Type of rate	percentage			
TOTAL ESTIMATED PROJECT COSTS				\$174,985.15

Budget narrative

Items included in the budget proposal are electronic commercial smart meters, the labor to install them, and the electronic software and hardware needed to read the meters. The non-federal funding for this project will be supplied by the TPWA, an authority under the direction of the City of Thomas Board of Directors. There will be no in-kind donations or contributions used to fund any part of this project.

2018 Capital Improvement Needs 5-Year Plan Summary

#	Project	Comments	Funding Source	Total Costs (\$)	2018 Costs (\$)	2019 Costs (\$)	2020 Costs (\$)	2021 Costs (\$)	2022 Costs (\$)
1	Water Meter Replacement Project/ Installation of SCADA System	Installation of a SCADA system; new electronic meters at all water wells, TPWA building, water tower, city park.	Department of the Interior - Bureau of Reclamation	\$75,000	\$75,000				
2	Street Improvements	Need asphalt overlay on existing streets.	City & Future Grant Application	\$300,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
3	Water Tower	Needs cleaned and painted.	Unfunded	\$90,000	\$90,000				
4	Sidewalks	Replace 2 blocks on Broadway (Phase 1) Main Street(Phase 2)	City and ODOT Grant	\$1,200,000	\$750,000	\$450,000			
5	Water System Improvements	Replace old water lines & fire hydrants.	Unfunded	\$250,000				\$250,000	
6	Water Well Improvements	Repair or replace inoperative well.	Unfunded	\$100,000				\$100,000	
7	Community Bldg/Shelter	Need building for city offices & emergency shelter.	Unfunded	\$750,000				\$750,000	
8	Fire Truck	Need Tanker Truck	Unfunded	\$50,000				\$50,000	
9	Bunker Gear - Fire Department	Needs replaced	Unfunded	\$32,000				\$32,000	
10	Sub-Totals			\$2,847,000	\$975,000	\$510,000	\$60,000	\$1,242,000	\$60,000

2018 Capital Improvement Needs 5-Year Plan Summary

#	Project	Comments	Funding Source	Total Costs (\$)	2018 Costs (\$)	2019 Costs (\$)	2020 Costs (\$)	2021 Costs (\$)	2022 Costs (\$)
1	Balance from Page 1			\$2,847,000	\$975,000	\$510,000	\$60,000	\$1,242,000	\$60,000
2	Swimming Pool	Needs new wall & demont decking.	Unfunded	\$25,000				\$25,000	
3	Drainage Study	Study to determine drainage issues & improvements needed.	Unfunded	\$40,000				\$40,000	
4									
5									
6									
7									
8									
9									
10	Totals			\$2,912,000	\$975,000	\$510,000	\$60,000	\$1,307,000	\$60,000